

WHAT IS CLAIMED IS:

1. A sealer comprising:

a base configured to be mounted on a tabletop;

a first jaw connected to the base;

a second jaw operatively aligned with the first jaw;

an actuator coupled to the second jaw to provide relative motion with respect to the first jaw; and

a heating device coupled to the first and second jaws for heating the jaws to a set temperature to enable material to be contacted and welded when the first and second jaws are in a closed position.

2. The sealer as recited in claim 1, wherein the first jaw and the second jaw include a non-stick liner.

3. The sealer as recited in claim 1, wherein the actuator is coupled to a guide rod to provide a controlled displacement between the first jaw and the second jaw.

4. The sealer as recited in claim 1, further comprising a timing device which measures a time in which the first and second jaws are in the closed position.

5. The sealer as recited in claim 1, further comprising a pressure sensor which measures the pressure and adjusts the actuator accordingly.

6. The sealer as recited in claim 1, wherein the heating device is controlled by feedback from a temperature measurement device.

5 7. The sealer as recited in claim 1, further comprising a sensor operatively positioned relative to the first jaw and the second jaw to sense a position of a workpiece relative to the first and second jaws.

8. The sealer as recited in claim 7, wherein the sensor triggers the actuator to close the first and second jaws.

9. The sealer as recited in claim 1, further comprising a casing, the casing dimension and configured to enclose the first jaw and the second jaw and the heating device for operator safety.

10. The sealer as recited in claim 1, wherein the casing includes a guide which enables a workpiece to be aligned with and disposed between the first and second jaws.

11. The sealer as recited in claim 1, further comprising a memory which stores a plurality of settings combinations for different workpieces.

12. The sealer as recited in claim 1, wherein the actuator is coupled to a mechanism which simultaneously provides a rotational and translations motion to the first jaw.

13. A heat sealer for clamshell packages, comprising:

5 a base configured to be mounted on a tabletop;

a first jaw connected to the base;

10 a second jaw operatively aligned with the first jaw;

an actuator coupled to the second jaw to provide relative motion with respect to the first jaw;

a heating device coupled to the first and second jaws for heating the jaws to a set temperature to enable material to be contacted and welded when the first and second jaws are in a closed position; and

15 a casing coupled to the base and enclosing at least the first and second jaws and the heating device to prevent casual operator contact with the first and second jaws and the heating device.

14. The sealer as recited in claim 13, wherein the first jaw and the second jaw include a non-stick liner.

15. The sealer as recited in claim 13, wherein the actuator is coupled to a guide rod to provide a controlled displacement between the first jaw and the second jaw.

16. The sealer as recited in claim 13, further comprising a timing device which measures a time in which the first and second jaws are in the closed position.

17. The sealer as recited in claim 13, further comprising a pressure sensor which measures the pressure and adjusts the actuator accordingly.

18. The sealer as recited in claim 13, wherein the heating device is controlled by feedback from a temperature measurement device.

19. The sealer as recited in claim 13, further comprising a sensor operatively positioned relative to the first jaw and the second jaw to sense a position of a clamshell package relative to the first and second jaws.

20. The sealer as recited in claim 19, wherein the sensor triggers the actuator to close the first and second jaws.

21. The sealer as recited in claim 1, wherein the casing includes a guide which enables a clamshell package to be aligned with and disposed between the first and second jaws.

22. The sealer as recited in claim 13, further comprising a memory which stores a plurality of settings combinations for different clamshell packages.

23. The sealer as recited in claim 13, wherein the actuator is coupled to a mechanism which simultaneously provides a rotational and translations motion to the first jaw.

24. A method for sealing a workpiece, comprising the steps of:
configuring a heat sealer by adjusting at least one of temperature, pressure and
engagement time of jaws;
5 placing a package in the sealer by presenting one side of the package to be sealed into the
sealer; and
closing jaws of the sealer to engage the package in a hands-free weld operation.

25. The method as recited in claim 24, further comprising the step of adjusting a trigger
10 sensor, which triggers the jaws to close.